



2021

2022

2023

2024

2025

 **D3PM**

 **Diffusion-LM**

**W** **FiLM**

 **MDLM**

 **LLaDA**

  **LD4LG**

 **SEDD**

 **EDLM**







  **DiffuGPT**

 **DiffusionBERT**

**W** **SSD-LM**

  **DiffuLLaMA**

  **HDLM**

-  **Discrete Diffusion**
-  **Continuous Diffusion**
-  **Specialized Diffusion**
-  **Autoregression**
-  **Reinforcement Learning**
-  **Inference Latency**

 **RDMs**

 **RADD**

**Ucla**  **d1-LLaDA**

 **Plaid 1B**

 **MD4**

 **Gemini Diffusion**

 **DiffuSeq**

  **Mercury Coder**

  **SpecDiff**

**W** **SSD-2**

 **CLLM**

 **MMaDA**